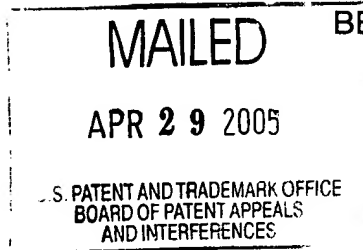


The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

Paper No. 26

UNITED STATES PATENT AND TRADEMARK OFFICE



BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JOHN E. DONOHUE

Appeal No. 2004-1564
Application No. 09/433,332

ON BRIEF

Before THOMAS, RUGGIERO, and DIXON, **Administrative Patent Judges**.
DIXON, **Administrative Patent Judge**.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1-29,
which are all of the claims pending in this application.

We REVERSE.

BACKGROUND

The appellant's invention relates to a digital return path for a hybrid fiber/coax network. An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced below.

1. A hybrid fiber/coax network, comprising:

a head end;

at least one optical distribution node coupled to the head end over at least one fiber optic link;

at least one coaxial cable link, coupled to the at least one optical distribution node, that receives upstream, digital data from a plurality of modems; and

wherein the at least one optical distribution node has a digital return path that includes:

a laser transmitter coupled to the fiber optic link that transmits the upstream, digital data to the head end;

a data concentrator coupled to provide the upstream, digital data to the laser; and

for the at least one coaxial cable link,

a frequency translator that receives and translates the upstream, digital data from the plurality of modems to a different carrier frequency and retransmits the signal to the plurality of modems for collision detection; and

a data interface coupled between frequency translator and the data concentrator that determines whether a collision occurred with the upstream, digital data so as to

Appeal No. 2004-1564
Application No. 09/433,332

prevent corrupted upstream, digital data
from being passed on to the head end.

The prior art references of record relied upon by the examiner in rejecting the
appealed claims are:

Usui	4,531,239	Jul. 23, 1985
Kavehrad et al. (Kavehrad)	4,701,909	Oct. 20, 1987
Eng et al. (Eng)	4,754,451	Jun. 28, 1988
Chan et al. (Chan)	4,816,825	Mar. 28, 1989
Griesing	4,959,829	Sep. 25, 1990
Beveridge	5,469,495	Nov. 21, 1995
Peyrovian	5,768,682	Jun. 16, 1998
Hutchison et al. (Hutchison)	5,838,989	Nov. 17, 1998
Dapper et al. (Dapper)	6,282,683	Aug. 28, 2001

(Filed Sep. 15, 1999)

Claims 1-4, 6, 9, 18, 20, 22, and 23 stand rejected under 35 U.S.C. § 103 as
being unpatentable over Dapper in view of Chan further in view of Eng. Claim 5 stands
rejected under 35 U.S.C. § 103 as being unpatentable over Dapper in view of Chan
further in view of Eng and Kavehrad. Claim 7 stands rejected under 35 U.S.C. § 103 as
being unpatentable over Dapper in view of Chan further in view of Eng and Peyrovian.
Claims 8 and 21 stand rejected under 35 U.S.C. § 103 as being unpatentable over
Dapper in view of Chan further in view of Eng and Beveridge. Claim 19 stands rejected
under 35 U.S.C. § 103 as being unpatentable over Dapper in view of Chan further in
view of Eng and Hutchison. Claims 10-12, 14, and 17 stand rejected under 35 U.S.C.
§ 103 as being unpatentable over Dapper in view of Chan. Claim 13 stands rejected
under 35 U.S.C. § 103 as being unpatentable over Dapper in view of Chan further in
view of Kavehrad and Griesing. Claim 15 stands rejected under 35 U.S.C. § 103 as

being unpatentable over Dapper in view of Chan further in view of Peyrovian. Claim 16 stands rejected under 35 U.S.C. § 103 as being unpatentable over Dapper in view of Chan further in view of Beveridge. Claims 24, 25, and 29 stand rejected under 35 U.S.C. § 103 as being unpatentable over Dapper in view of Chan further in view of Usui. Claim 26 stands rejected under 35 U.S.C. § 103 as being unpatentable over Dapper in view of Chan further in view of Usui and Peyrovian. Claim 27 stands rejected under 35 U.S.C. § 103 as being unpatentable over Dapper in view of Chan further in view of Usui and Griesing. Claim 28 stands rejected under 35 U.S.C. § 103 as being unpatentable over Dapper in view of Chan further in view of Usui and Beveridge.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellant regarding the above-noted rejections, we make reference to the examiner's answer (Paper No. 21, mailed Dec. 16, 2003) for the examiner's reasoning in support of the rejections, and to the appellant's brief (Paper No. 19, filed Nov. 03, 2003) and reply brief (Paper No. 22, filed Feb. 23, 2004) for the appellant's arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellant's specification and claims, to the applied prior art references, and to the

respective positions articulated by the appellant and the examiner. As a consequence of our review, we make the determinations which follow.

35 U.S.C. § 103

In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a ***prima facie*** case of obviousness. **See *In re Rijckaert***, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). A ***prima facie*** case of obviousness is established by presenting evidence that the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the references before him to make the proposed combination or other modification. **See *In re Lintner***, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972). Furthermore, the conclusion that the claimed subject matter is ***prima facie*** obvious must be supported by evidence, as shown by some objective teaching in the prior art or by knowledge generally available to one of ordinary skill in the art that would have led that individual to combine the relevant teachings of the references to arrive at the claimed invention. **See *In re Fine***, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Rejections based on § 103 must rest on a factual basis with these facts being interpreted without hindsight reconstruction of the invention from the prior art. The examiner may not, because of doubt that the invention is patentable, resort to speculation, unfounded assumption or hindsight reconstruction to supply deficiencies in the factual basis for the rejection. **See *In re Warner***, 379 F.2d 1011, 1017, 154 USPQ 173, 177 (CCPA 1967), **cert.**

denied, 389 U.S. 1057 (1968). Our reviewing court has repeatedly cautioned against employing hindsight by using the appellant's disclosure as a blueprint to reconstruct the claimed invention from the isolated teachings of the prior art. **See, e.g., Grain Processing Corp. v. American Maize-Prods. Co.**, 840 F.2d 902, 907, 5 USPQ2d 1788, 1792 (Fed. Cir. 1988).

When determining obviousness, "the [E]xaminer can satisfy the burden of showing obviousness of the combination 'only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references.'" **In re Lee**, 277 F.3d 1338, 1343, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002), citing **In re Fritch**, 972 F.2d 1260, 1265, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992). "Broad conclusory statements regarding the teaching of multiple references, standing alone, are not 'evidence.'" **In re Dembiczak**, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). "Mere denials and conclusory statements, however, are not sufficient to establish a genuine issue of material fact." **Dembiczak**, 175 F.3d at 999-1000, 50 USPQ2d at 1617, citing **McElmurry v. Arkansas Power & Light Co.**, 995 F.2d 1576, 1578, 27 USPQ2d 1129, 1131 (Fed. Cir. 1993).

Further, as pointed out by our reviewing court, we must first determine the scope of the claim. "[T]he name of the game is the claim." **In re Hiniker Co.**, 150 F.3d

1362,1369, 47 USPQ2d 1523, 1529 (Fed. Cir. 1998). Therefore, we look to the language of independent claim 1. Claim 1 recites a "hybrid fiber/coax network" having:

at least one coaxial cable link, coupled to the at least one optical distribution node, that receives upstream, digital data from a plurality of modems; and

wherein the at least one optical distribution node has a digital return path that includes:

a laser transmitter coupled to the fiber optic link that transmits the upstream, digital data to the head end;

a data concentrator coupled to provide the upstream, digital data to the laser; and for the at least one coaxial cable link, a frequency translator that receives and translates the upstream, digital data from the plurality of modems to a different carrier frequency and retransmits the signal to the plurality of modems for collision detection; and

a data interface coupled between frequency translator and the data concentrator that determines whether a collision occurred with the upstream, digital data so as to prevent corrupted upstream, digital data from being passed on to the head end.

While appellant's arguments appear at first blush to be fairly general and non-specific, we agree with appellant that the combination as proposed by the examiner would not have taught or fairly suggested the claimed hybrid fiber/coax network as recited in independent claim 1. From our review of the teachings of Dapper, Chan and Eng, we find that the examiner has assembled a combination of distinct teachings relating to various parts of appellant's claimed invention, but yet the combination does not teach or suggest the claimed combination of elements. Furthermore, we do not find that the

examiner has established a sufficient showing as to why it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Chan with its closed and solely coaxial cable system together with an open hybrid coax/fiber system of Dapper which does not teach or relate to the problems disclosed by Chan. Then on top of this deficiency, why would the skilled artisan further look to the teachings of Eng with respect to a data concentrator which is not related to open hybrid coax/fiber systems for preventing the transmission of invalid/corrupt data due to collision.

Appellant argues that the examiner has not established an evidentiary basis to support the combination of Dapper with Chan. (See brief at page 11.) As discussed above, we agree with appellant (brief at page 12) that the examiner has relied upon impermissible hindsight in an attempt to reconstruct the claimed invention. We find this improper and find that the examiner has not made the requisite findings and established a *prima facie* case of obviousness of the invention as recited in independent claim 1.

The examiner maintains that the combination of Dapper with Chan is proper and that the "combination results in an increase in the reliability of the cable system in Dapper. In addition, both Dapper and Chan are analogous art since both Dapper and Chan contain a cable system and since the modifications of Dapper suggested by Chan concern only the cable system in Dapper." (See answer at page 19.) We disagree with the examiner's rationale and do not find that the teachings of any cable system are

necessarily combinable into a hybrid fiber/coax network. The examiner maintains that Dapper discloses a mechanism for detecting errors in transmissions due to collisions, but the specifics of the mechanism are not taught. (See answer at page 19.) We disagree with the examiner and find no disclosure of a "mechanism" for detecting collisions at column 63 of Dapper. Appellant argues that Dapper only provides a brief discussion of what can be done once a collision is detected. (See reply brief at page 2.) Appellant argues that Dapper does not disclose in the cited passage what technique can be used for actually detecting a collision and the examiner has not identified any teaching in Dapper which would have suggested that the teachings of Chan are better or more desirable than whatever technique is implemented in Dapper. (See reply brief at page 2.) We agree with appellant.

As discussed above, we find that the combination of Dapper, Chan and Eng does not teach or fairly suggest the invention as recited in independent claim 1, assuming, arguendo, that the teachings are properly combinable. Furthermore, we find that the examiner has neither shown in the teachings of the prior art references a motivation for the combination nor made a convincing line of reasoning to support the proposed combination of the prior art teachings. Therefore, the examiner has not established a requisite *prima facie* case of obviousness of the invention as recited in independent claim 1 and its dependent claims. Similarly, we find that the examiner has not established a requisite *prima facie* case of obviousness of the invention as recited in independent claim 18 and its dependent claims. With respect to independent


claim 10, the examiner relies only on the teachings of Dapper and Chan. Here, we do not find that the examiner has remedied the deficiency on the motivation for the combination of the two teachings, and we do not find that the examiner has established a ***prima facie*** case of obviousness of this broader claim and its dependent claims.

CONCLUSION

To summarize, the decision of the examiner to reject claim 1-29 under 35 U.S.C. § 103 is reversed.

REVERSED

REVERSED



JAMES D. THOMAS
Administrative Patent Judge

Joseph F. Ruggiero
JOSEPH F. RUGGIERO
Administrative Patent Judge


JOSEPH L. DIXON
Administrative Patent Judge

BOARD OF PATENT
APPEALS
AND
INTERFERENCES

JLD:clm

Appeal No. 2004-1564
Application No. 09/433,332

FOGG AND ASSOCIATES, LLC
P.O. BOX 581339
MINNEAPOLIS, MN 55458-1339